

## **INSTRUCTIONS FOR COMPLETING FEDERAL SLUDGE PROGRAM DISCHARGE MONITORING FORMS**

The following are the instructions to be used for submission of the annual sewage sludge Discharge Monitoring Reports (DMRs) required by 40 CFR Part 503.18 and 503.48. These reports are due by February 19, 2003 to EPA Region III, the sludge Permitting Authority for the states of Delaware, Maryland, Pennsylvania, Virginia, West Virginia and the District of Columbia. Along with the DMR report submission, facilities should submit the required information as requested in the Section entitled “Additional Reporting Requirements” found below.

A letter explaining the purpose of these reports accompanies the preprinted DMRs as they are sent to facilities based upon previous annual sludge reports. For example, if a facility reported land application last year then they would receive a SLD P and SLD L form. Every facility will receive at a minimum, the Production and Use form (SLD P). If a facility changes the method of disposal since last year, the letter references contacts who could forward any additional needed forms. The complete set of sludge DMR forms consists of:

1. Production and Use (Outfall SLD P);
2. Land Application (Outfall SLD L); and,
3. Incineration (outfall SLD I).

If a form does not apply to the facility’s use or disposal practice for sewage sludge, the facility should mark the form “NA” in the right-hand corner and complete with the appropriate signature.

On the preprinted DMRs that EPA provides the facility should review to ensure that it includes permit number, facility name, facility address, sludge contact name, and phone number. If any of this information is incorrect, the facility should correct it on the DMR form.

The completed and signed DMR reports along with necessary additional reporting requirements (as noted above) must be mailed to EPA Region III at the following address:

**Sludge DMR (3WP52)  
USEPA-Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029**

### **Frequency of Analysis /Monitoring Period**

For land application and incineration (Forms SLD L and SLD I), facilities must indicate the actual frequency that sewage sludge is monitored in the “Frequency of Analysis” column. The minimum required frequency, indicated in Table 1 of 40 CFR 503.16 and 503.46 (**see frequency of monitoring in enclosures**), is dependent upon the amount of sludge which is annually land applied or incinerated, respectively.

A separate report shall be made and completed for each monitoring period, and the appropriate monitoring period date must be indicated at the top of the form. For example, if a facility is required to monitor once per quarter, four monitoring reports must be completed for each reporting year.

**Additional Reporting Requirements - This information must be attached to the DMR forms when submitted to EPA.**

1. In addition to the enclosed forms, facilities which land apply sewage sludge are responsible for submitting the additional information required in 40 CFR 503.18, (**e.g., appropriate certification statements, descriptions of how pathogen and vector attraction reduction requirements are met, descriptions of how the management practices in 503.14 are being met, and descriptions of how site restrictions (if applicable) in 503.32(b)(5) are being met**).
2. Facilities which dispose of sewage sludge by incineration are required to provide the information required in Part 503.47(b) through 503.47(h). (**e.g. metal concentrations, total hydrocarbons, NESHAPS, temperatures, and others**).

**COMPLETION OF FORMS**

The following instructions are for use in completing the individual sections of each type of sludge DMR form.

**PRODUCTION AND USE - FORM SLD P**

This form is to be completed by all major POTWs (facilities with a design flow rate equal to or greater than one million gallons per day, or that serves 10,000 people or more) and/or designated Class I facilities (i.e., facilities required to have a pretreatment program, all POTWs that incinerate their sludge). The annual production and use information must be reported in **dry** metric tons per year (dmt/yr, defined as 100% solids content); other information shall be in the units indicated. **If a particular sludge use or disposal does not apply indicate in Column B with a "0".**

**Annual Amount Sludge Disposed by Other Methods - (Row 1) - Each facility must indicate the amount of sewage sludge which was prepared and disposed by a method other than land application, surface disposal, incineration or co-disposed in a Municipal Solid Waste Landfill(MSWLF). A facility which provides sewage sludge to another facility for further processing which changes the quality of the sewage sludge, prior to land application, must report the amount in Row 1, provided to the other facility. (If sludge was sent to another facility please include relative disposal information in the comment section).**

**Annual Amount Sludge Incinerated - (Row 2)** - Each facility must indicate the amount of sewage sludge which was prepared and disposed in a sewage sludge incinerator.

**Annual Sludge Production Total - (Row 3)** - Facilities must indicate the amount of sewage sludge produced after final sludge treatment for the reporting period.

**Annual Amount of Sludge Land Applied - (Row 4)** - Each facility must indicate the amount of sewage sludge which was prepared and which was beneficially reused by land application. A facility which provides sewage sludge to another facility, for further processing prior to land application should report that amount in Row 1. (refer to “**Annual Sludge Disposed by Other Methods**” above).

**Annual Amount Sludge Disposed Surface Unit - (Row 5)** - Each facility must indicate the amount of sewage sludge which was prepared and disposed of in a surface disposal unit.

**Annual Sludge Disposed in Landfill - (Row 6)** - Each facility must indicate the amount of sewage sludge which was prepared and co-disposed in a (MSWLF).

## **LAND APPLICATION - FORM SDL L**

This form is to be completed by facilities which prepare bulk sewage sludge for land application for beneficial reuse or which prepare sewage sludge to be sold or given away in a bag or other container. This form does not apply to facilities which provide all of their sewage sludge to another facility which changes the quality of the sludge prior to land application.

There are several options for land applying biosolids. Please indicate in the open space at the bottom of form SDL L, the land application option used. Complete a separate SDL L form for each land application option utilized. **Please, refer to the enclosed tables and instruction examples.**

**OPTION 1 - Exceptional Quality Biosolids** - biosolids that meet low pollutant limits and Class A pathogen reduction alternatives (see attachment Table 2-5) and that have a reduced level of degradable compounds that attract vectors.

For biosolids to qualify under the exceptional quality option, the following requirements must be met:

The ceiling concentrations for pollutants found in Table 1 may not be exceeded. Report sampling results for the pollutants listed in Table 1, in **Column D of sample form SDL L**.

The pollutant concentration limits found in Table 3 may not be exceeded. Report sampling results for the pollutants listed in Table 3, in **Column C of sample form SDL L**.

One of the Class A pathogen requirements found in Table 2-5 must be met.  
If the sludge meets the Class A requirements, place the number **one (1) in Row 2 of sample form SLD L, Column D. Indicate in Row 3 of sample form SLD L, Column D, the number of the pathogen alternative used (see Table 2-5)**

One of the first eight (8) vector attraction reduction options found in Table 2-6 must be met.  
Indicate in **Row 4 of sample form SLD L, Column D**, the number of the vector attraction reduction option used (see Table 2-6).

**OPTION 2 - Pollutant Concentration Biosolids** - biosolids that meet the same low-pollutant concentration limits of exceptional quality biosolids, but only meet Class B pathogen reduction requirements (see Table 2-5) and/or are subject to site management practices rather than treatment options to reduce vector attraction properties.

For biosolids to qualify under the Pollutant Concentration option, the following requirements must be met:

The ceiling concentrations for pollutants found in Table 1 may not be exceeded.  
Report sampling results for the pollutants listed in Table 1, in **Column D of sample form SLD L**.

The pollutant concentration limits found in Table 3 may not be exceeded.  
Report sampling results for the pollutants listed in Table 3, in **Column C of sample form SLD L**.

One of the three (3) Class B pathogen requirements must be met (see Table 2-5) as well as site restrictions. If the sludge meets the Class B requirements, place the number **two (2) in Row 2 of the sample form SLD L, Column D. Indicate in Row 3 of the sample SLD L form, Column D, the number of the pathogen alternative used (see table 2-5).**

One of ten (10) vector attraction reduction options must be achieved (see Table 2-6).  
Indicate in **Row 4 of sample form SLD L, Column D**, the vector attraction reduction option used.

**OPTION 3 - Cumulative Pollutant Loading Rate Biosolids** - biosolids exceed at least one of the pollutant concentration limits of exceptional quality and pollutant concentration biosolids but meet the ceiling concentration limits.

For biosolids to qualify under the Cumulative Pollutant Loading Rate option, the following requirements must be met:

The ceiling concentrations for pollutants found in Table 1 may not be exceeded.  
Report sampling results for the pollutants listed in Table 1, in **Column D of sample form**

## **SDL L.**

Cumulative Pollutant Loading Rates found in Table 2 may not be exceeded. Report sampling results if the loading rate **has reached 90%** for the pollutants listed in **Table 2, in Column B of sample Form SDL L.**

Either the Class A or B pathogen requirements found in Table 2-5 must be met. If the sludge meets the Class A requirements, place the number one (1) in Row 2 of the sample form SDL L, Column D. If the sludge meets the Class B requirements, place the number **two (2) in Row 2 of the sample form SDL L, Column D. Indicate in Row 3 of sample form SLD L, Column D, the number of the pathogen alternative used (see table 2-5).**

One of ten (10) vector attraction reduction options found in Table 2-6 must be met. Indicate in **Row 4 of sample form SDL L, Column D,** the vector attraction option used.

**OPTION 4 - Annual Pollutant Loading Rate Biosolids** - biosolids that are sold or given away in a bag or other container for application to the land that exceed the pollutant limits of exceptional quality biosolids but meet the ceiling concentration limits.

For biosolids to qualify under the Annual Pollutant Loading Rate option, the following requirements must be met:

The ceiling concentrations for pollutants found in Table 1 may not be exceeded. Report sampling results for the pollutants listed in Table 1, in **Column D of sample form SDL L.**

The Annual Pollutant Loading Rates found in Table 4 may not be exceeded. Report sampling results for the pollutants listed in Table 4, in **Column A of sample form SDL L.**

The Class A pathogen requirements found in Table 2-5 must be met. If the sludge meets the Class A requirements, place the number **one (1) in Row 2 of sample form SLD L, Column D. Indicate in Row 3 of sample form SLD L, Column D, the number of the pathogen alternative used (see table 2-5).**

One of the first eight (8) vector attraction reduction options found in Table 2-6 (**refer to attachments**) must be met. Indicate in **Row 4 of sample form SDL L, Column D,** the vector attraction option used.

## **LANDFILLING**

**Compliance With the Part 258 Requirements for Sludge** - Facilities which generate sewage sludge which is disposed in a municipal solid waste landfill must meet the requirements of 40 CFR Part 258 (passes Toxicity Characteristics Leaching Procedure (TCLP) and paint filter test) to be considered in compliance with Section 405(d) of the CWA. These facilities are not required to report this information; **however**, if EPA performs an inspection at said facility and the facility is unable to document compliance with Part 258, the facility will be considered out of compliance with Part 503. **We are asking that facilities which dispose of sludge, at least report the amount of sludge (dry metric tons) being disposed in a MSWLF and where disposed. Please, indicate where in the comment section of the form.**

### **INCINERATION - SLD I**

This form is to be completed by facilities which dispose of sewage sludge in a sewage sludge incinerator.

Pollutant limits - The facility must indicate on form SLD I the concentrations of pollutants in sewage sludge. At a minimum, values need to be reported at the frequencies indicated by Table 1 of Part 503.46.

**Total Hydrocarbons (THC) or carbon monoxide (CO) Limits** - the facility must report the THC or CO concentration in the incinerator stack. If a facility has not installed a THC or CO monitor explain why not in the “comment” section at the bottom of the form and indicate when a THC or a CO monitor will be installed. If the facility chooses to use CO in lieu of THC, the facility must be in compliance with the 100 ppm standard immediately. If the facility has not been issued an incinerator permit or a Federal Register notice telling the facility how to install, calibrate, operate, and maintain a THC monitor, the facility is not considered to be in violation for failing to achieve the THC limit of 100ppm. However, if a permit or a Federal Register notice is issued and the facility has not installed a THC monitor, the facility risks being in violation for THC.

### **SURFACE DISPOSAL**

Surface disposal is infrequently utilized in EPA Region III, so DMR forms are not being provided at this time. However, facilities who utilize this option must provide the information listed below.

**Unit With Liner/Leachate Collection System** - Facilities must indicate the presence of a liner and leachate collection system in the surface disposal unit.

**Unit Boundary to Property Line** - Facilities whose sewage sludge disposal unit does not have a liner and a leachate collection system must indicate the actual minimum distance (in meters) from the sewage sludge disposal unit boundary to the property line.

**Metal Concentrations** - Facilities whose sewage sludge disposal unit does not have a liner and a leachate collection system, must indicate the allowable pollutant concentrations for Arsenic, Chromium, and Nickel from Table 1 or 2 of Part 503.23, based on the unit boundary to

property line distance. For purposes of reporting sludge concentrations and loadings, analytical values below detection limits shall be reported as “<x”, where “x” represents the detection limit.

**Level of Pathogen Requirement Achieved** - Facilities must indicate the level of pathogen requirement achieved, if any (Class A, Class B, or none).

**Pathogen Alternative Used** - The alternative numbers are given in Part 503.32 (a) (3) through (8) for Class A (# 1-6) and Part 503.32(b) (2) through (4) for Class B (# 1-3). Facilities must indicate which alternative number is used to achieve the pathogen level indicated above.

**Vector Attraction Reduction Alternative Used** - The alternative numbers which apply to surface disposal (# 1-11) are given in Part 503.33(b)(1) through (11). Facilities must indicate which alternative was used to achieve the vector attraction reduction requirement.